-continued

<400> SEQUENCE: 4

aaggaaggaa gg 12

<210> SEQ ID NO 5
<211> LENGTH: 12
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: (1)..(1)
<223> OTHER INFORMATION: H2N Modifier

<400> SEQUENCE: 5

ccttccttcc tt 12

<210> SEQ ID NO 6
<211> LENGTH: 18
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: (1)..(1)
<223> OTHER INFORMATION: H2N Modifier

<400> SEQUENCE: 6

agttaggact tacgctac 18

<210> SEQ ID NO 7
<211> LENGTH: 18
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic
<220> FEATURE:
<221> NAME/KEY: misc_feature
<222> LOCATION: (1)..(1)
<223> OTHER INFORMATION: H2N Modifier

<400> SEQUENCE: 7

gtagcgtaag tcctaact 18

What is claimed is:

1. A method of producing a protein crystal comprising:

contacting a first conjugate comprising a first protein and a first polynucleotide with a second conjugate comprising a second protein and a second polynucleotide under conditions sufficient such that the first polynucleotide and the second polynucleotide hybridize to each other and the first protein and second protein associate via protein-protein interactions (PPI) to form the protein crystal.

2. The method of claim **1**, wherein the first protein and the second protein are the same.

3. The method of claim **1**, wherein the first protein and the second protein are different.

4. The method of any one of the preceding claims, wherein the first polynucleotide is from about 2 to about 30 nucleotides in length.

5. The method of any one of the preceding claims, wherein the second polynucleotide is from about 2 to about 30 nucleotides in length.

6. The method of any one of the preceding claims, wherein the first protein consists of one polynucleotide that is sufficiently complementary to one or more polynucleotides on the second protein to hybridize.

7. The method of any one of the preceding claims, wherein the first protein consists of two, three, four, or five polynucleotides that are sufficiently complementary to one or more polynucleotides on the second protein to hybridize.

8. The method of any one of the preceding claims, wherein the second protein consists of one polynucleotide that is sufficiently complementary to one or more polynucleotides on the first protein to hybridize.

9. The method of any one of the preceding claims, wherein the second protein consists of two, three, four, or five polynucleotides that are sufficiently complementary to one or more polynucleotides on the first protein to hybridize.